

ABSTRACT OF THE DISCLOSURE

Polar, monolithic CEC columns having an amine and/or cyano functional stationary phase are used to separate complex mixtures of saccharides. Using the positive-ion mode of detection for neutral saccharides, detection conditions 5 were optimized to low-femtomole sensitivities with the use of an ion trap mass spectrometer. The described column technology provides a universal system for separating a wide range of carbohydrates: mono- and oligosaccharides with the intact reducing end, as well as saccharide alditols.